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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,780	05/11/2005	Matthias Brunner	ZIMR/0014	3146

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EXAMINER

VELEZ, ROBERTO

ART UNIT	PAPER NUMBER
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2829

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/518,780	Applicant(s) BRUNNER, MATTHIAS	
	Examiner Roberto Velez	Art Unit 2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30,31 and 33-60 is/are pending in the application.
- 4a) Of the above claim(s) 30,31,33-49,56 and 58-60 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 50-55 and 57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 30-31, 37, 39-45, 48-49, 56, 58-60 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 09/01/2006.

Claims 30, 42 and 56 are drawn to the non-elected species of Fig. 1a. Claim 30 recites a second arrangement of contact areas connected with one or more of the input terminals of the drive circuit directly or via another component, wherein the one or more of the input terminals are also connected to the first arrangement of contact areas, which is disclosed in the species of Fig. 1a. This limitation is not disclosed in elected species of Fig. 3a. Claims 42 and 56 have similar language which makes reference to the species of Fig. 1a, not to the species of Fig. 3a.

Claims 31, 37, 39-41, 43-45, 48-49 and 58-59 depending from claims 30, 42 or 56 are withdrawn for the same reason.

Claim 60 is drawn to non-elected species of Fig. 2. Claim 60 recites further comprising generating a test pattern on a matrix of picture elements using a memory integrated in the drive circuit, which is disclosed in the species of Fig. 2. This limitation is not disclosed in elected species of Fig. 3a.

Response to Arguments

2. Applicant's arguments with respect to claims 50-55 and 57 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 50 and 57 are rejected under 35 U.S.C. 102(b) as being anticipated by Kuwashiro (US Pat. 5,945,984).

Regarding claim 50, Kuwashiro shows (Figures 1-3) a method for testing an optoelectronic device, comprising: a) making contact (using probes) between an external control (tester) and an arrangement of test contact areas [651-1, 651-2] which are larger than operational contact areas [641] (Col. 5, Ln 26 through Col. 6, Ln 35); b) providing an input terminal of a drive circuit [501] directly or via another component with input signals via the arrangement of test contact areas [651-1, 651-2] to generate a test pattern on a matrix of picture elements [2] (Col. 5, Ln 26 through Col. 6, Ln 35), wherein the drive circuit [501] is provided with signals for picture generation during operation via the operational contact areas [641] connected to the input terminal of the drive circuit [501] (Col. 5, Ln 47-52), the drive circuit [501] comprises the input terminal (lines connected to operational contact areas 641 and lines 753-1, 753-2, 753-3, 753-13, 753-14, 753-15, 753-16 connected to test contact areas) for receiving external signals, means [621] for modifying the external signals to form modified signals (Col. 6, Ln 6-25), and means [631] for providing the modified signals for the matrix of picture

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elements [2] during normal operation and during test mode; and c) testing the picture elements of the matrix of picture elements [2] (Col. 7, Ln 43 through Col. 8, Ln 27).

Regarding claim 57, Kuwashiro discloses everything as claimed above in claim 50, in addition, Kuwashiro shows (Figures 1-3) an optoelectronic device [3], which has been tested by a testing method according to claim 50.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 51-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuwashiro (US Pat. 5,945,984) in view of DiMassimo et al. (US Pat. 4,456,910).

Regarding claim 51, Kuwashiro discloses everything as claimed above in claim 50; in addition, Kuwashiro discloses wherein the input signals generate a test pattern (Col. 7, Ln 25 through Col. 8, Ln 27).

Kuwashiro fails to disclose wherein the input signals generate a periodic pattern. However, DiMassimo et al. discloses wherein the input signals generate a periodic pattern (Col. 2, Ln 24-30).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of DiMassimo et al. into the device of Kuwashiro by providing a periodic test pattern. The ordinary artisan would have been

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motivated to modify Kuwashiro in the manner set forth above for the purpose of easily detecting defects by monitoring an abnormality or change in the periodic pattern.

Regarding claim 52, Kuwashiro discloses everything as claimed above in claim 50; in addition, Kuwashiro shows (Fig. 1) discloses wherein the input signals generate a vertically, horizontally or diagonally test pattern (Fig. 1 shows that signal lines are connected in Xi direction. This could be interpreted as a horizontally direction. The input signal will follow the Xi direction. Therefore, the input signals generate a horizontally test pattern).

Kuwashiro fails to disclose wherein the input signals generate a periodic pattern. However, DiMassimo et al. discloses wherein the input signals generate a periodic pattern (Col. 2, Ln 24-30).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of DiMassimo et al. into the device of Kuwashiro by providing a periodic test pattern. The ordinary artisan would have been motivated to modify Kuwashiro in the manner set forth above for the purpose of easily detecting defects by monitoring an abnormality or change in the periodic pattern.

7. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuwashiro (US Pat. 5,945,984) in view of Henley (US Pat. 5,432,461).

Regarding claim 53, Kuwashiro discloses everything as claimed above in claim 50.

Kuwashiro fails to disclose wherein the picture elements are tested with a beam of charged particles or laser radiation. However, Henley shows (Fig. 1) wherein the picture elements are tested with a beam of charged particles or laser radiation.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Henley into the device of Kuwashiro by testing the picture elements with a beam of charged particles or laser radiation. The ordinary artisan would have been motivated to modify Kuwashiro in the manner set forth above for the purpose of testing the picture elements without using mechanical contact in order to avoid material corrosion.

8. Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuwashiro (US Pat. 5,945,984) in view of Kim (US Pat. 6,486,927).

Regarding claim 54, Kuwashiro discloses everything as claimed above in claim 50.

Kuwashiro fails to disclose the step of: a vacuum is generated in the vicinity of the optoelectronic device to be tested. However, Kim discloses wherein a vacuum is generated in the vicinity of the optoelectronic device to be tested (Col 5, Ln 43-48).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Kim into the device of Kuwashiro by providing a vacuum is generated in the vicinity of the optoelectronic device to be tested. The ordinary artisan would have been motivated to modify Kuwashiro in the manner set forth above for the purpose of attaching and securing the optoelectronic device to a stage while testing it.

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9. Claim 55 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuwashiro (US Pat. 5,945,984) in view of Hayashi (US Pat. 5,994,916).

Regarding claim 55, Kuwashiro discloses everything as claimed above in claim 50.

Kuwashiro fails to disclose wherein step c) comprises the following steps: c1) testing the picture elements in a portion of the matrix of picture elements; c2) shifting the optoelectronic device; and c3) testing the picture elements in a further portion of the matrix of picture elements. However, Hayashi discloses c1) testing the picture elements in a portion of the matrix of picture elements; c2) shifting the optoelectronic device; and c3) testing the picture elements in a further portion of the matrix of picture elements (Col 8, Ln 15-26).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Hayashi into the device of Kuwashiro by inspecting the optoelectronic device with the steps of testing the picture elements in a portion of the matrix of picture elements; shifting the optoelectronic device; and testing the picture elements in a further portion of the matrix of picture elements. The ordinary artisan would have been motivated to modify Kuwashiro in the manner set forth above for the purpose of testing the optoelectronic device in synchronism to accurately detect faulty devices.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

11. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberto Velez whose telephone number is 571-272-8597. The examiner can normally be reached on Monday-Friday 8:00am- 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ha Nguyen can be reached on 571-272-1678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roberto Velez/
Examiner, Art Unit 2829
09/15/2008

/Ha T. Nguyen/

Supervisory Patent Examiner, Art Unit 2829